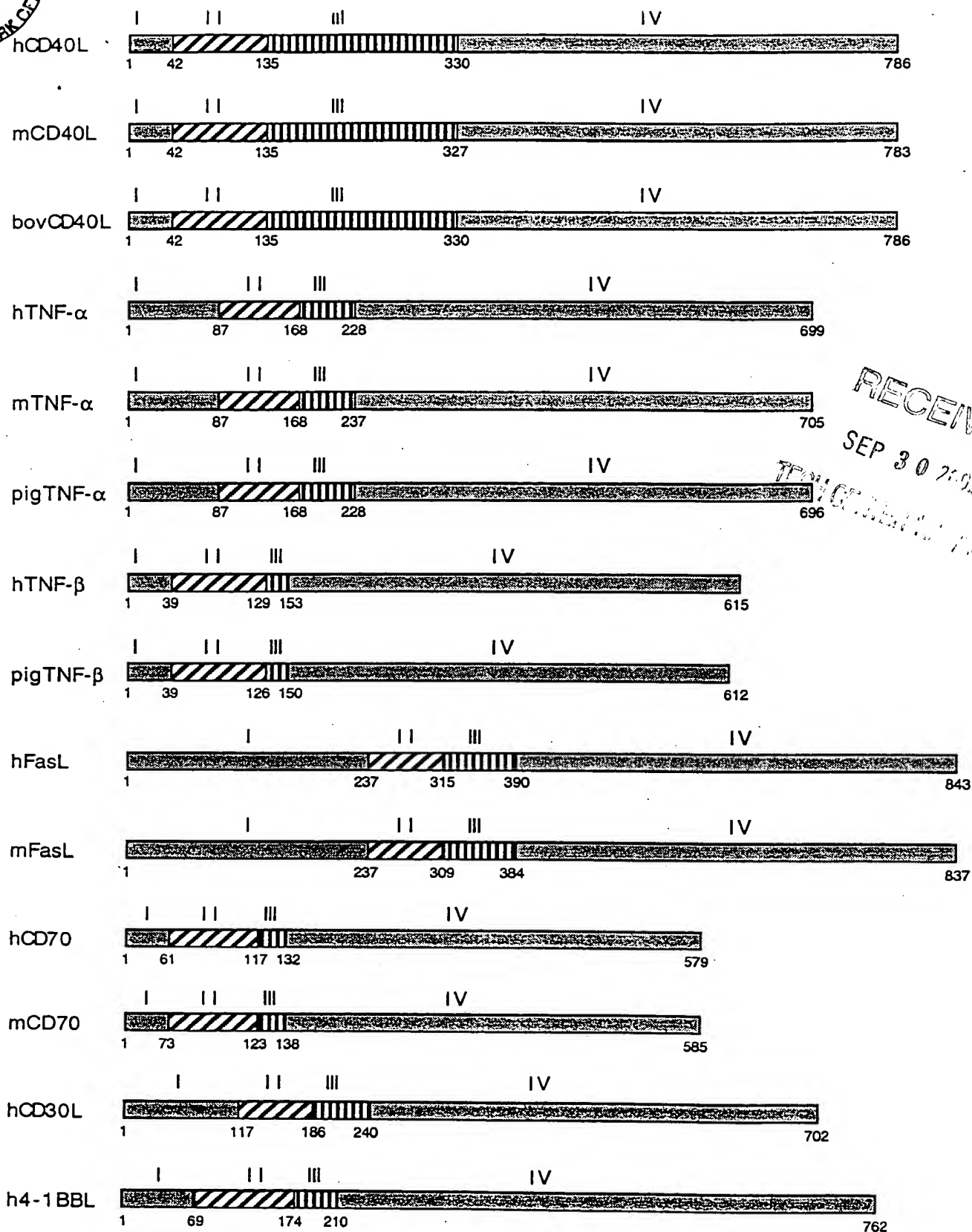




NOVEL EXPRESSION VECTORS CONTAINING ACCESSORY MOLECULE
LIGAND GENES AND THEIR USE FOR IMMUNOMODULATION AND
TREATMENT OF MALIGNANCIES AND AUTOIMMUNE DISEASES

Inventor(s): Thomas Kipps, et al.; Serial No.: 08/982,272
Filing Date: December 1, 1997; Atty. Docket No.: 041673-2069



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DOMAINS: I - Cytoplasmic Domain; II - Transmembrane Domain; III - Proximal Extracellular Domain; IV - Distal Extracellular Domain (putative soluble form)

Figure 1

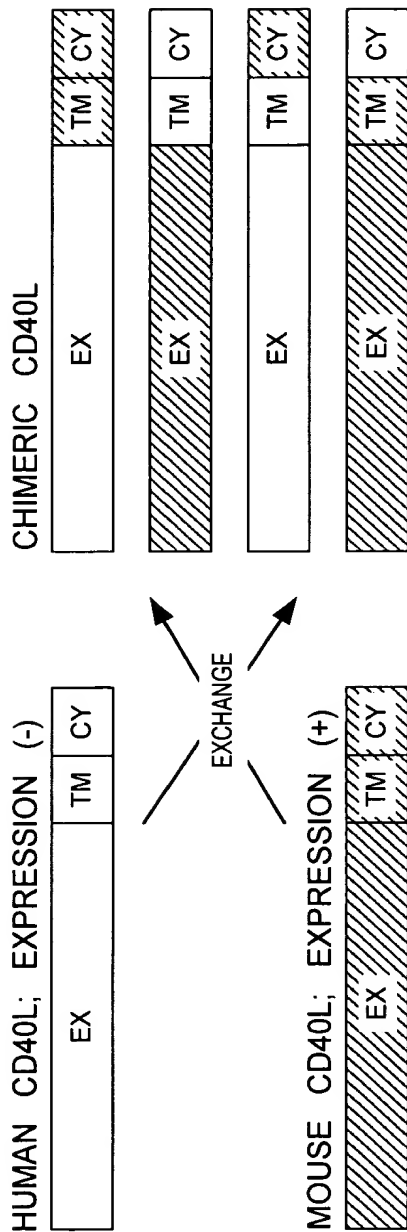


Figure 2

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TECH CENTER 15



HeLa

CLL

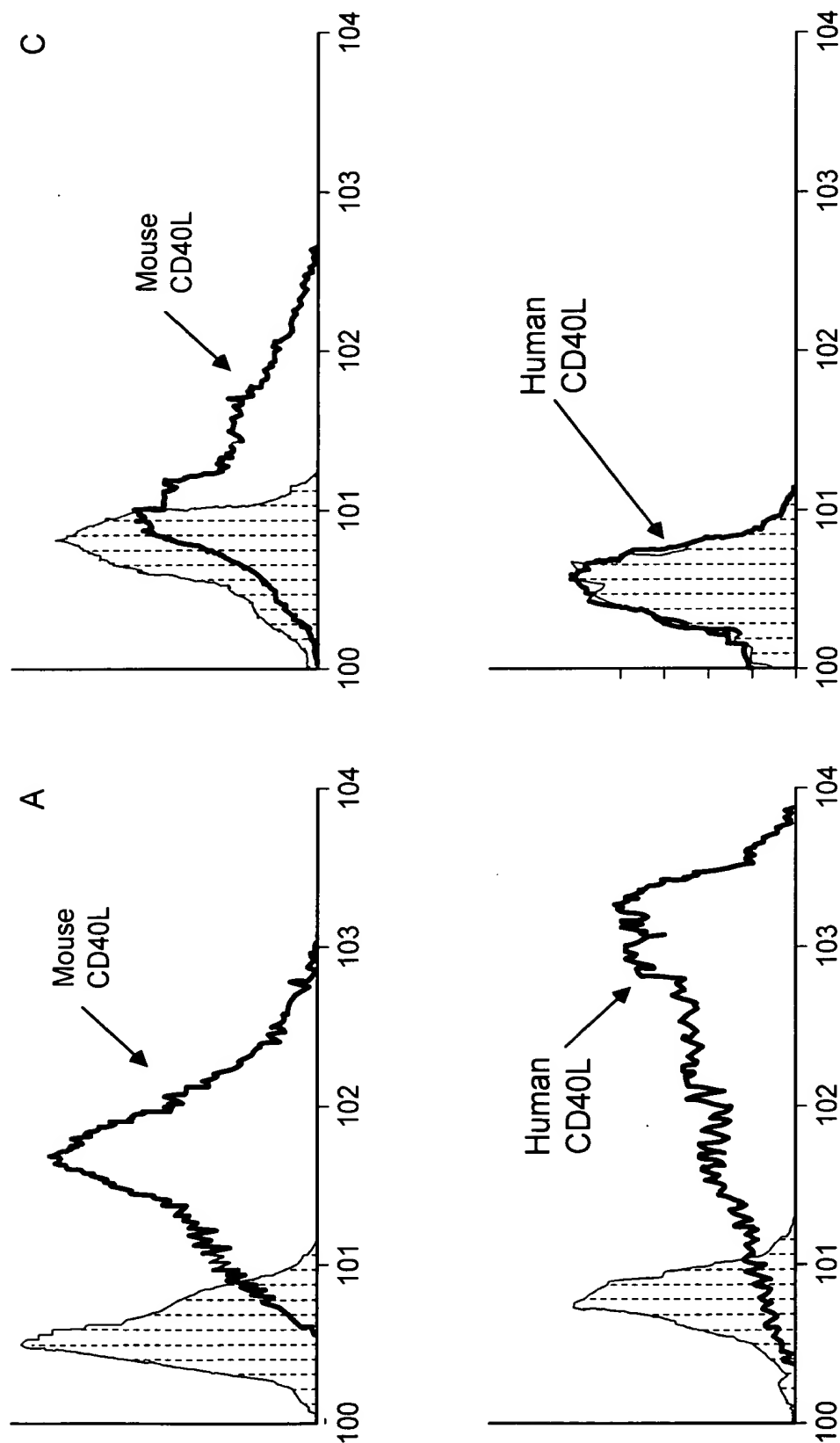


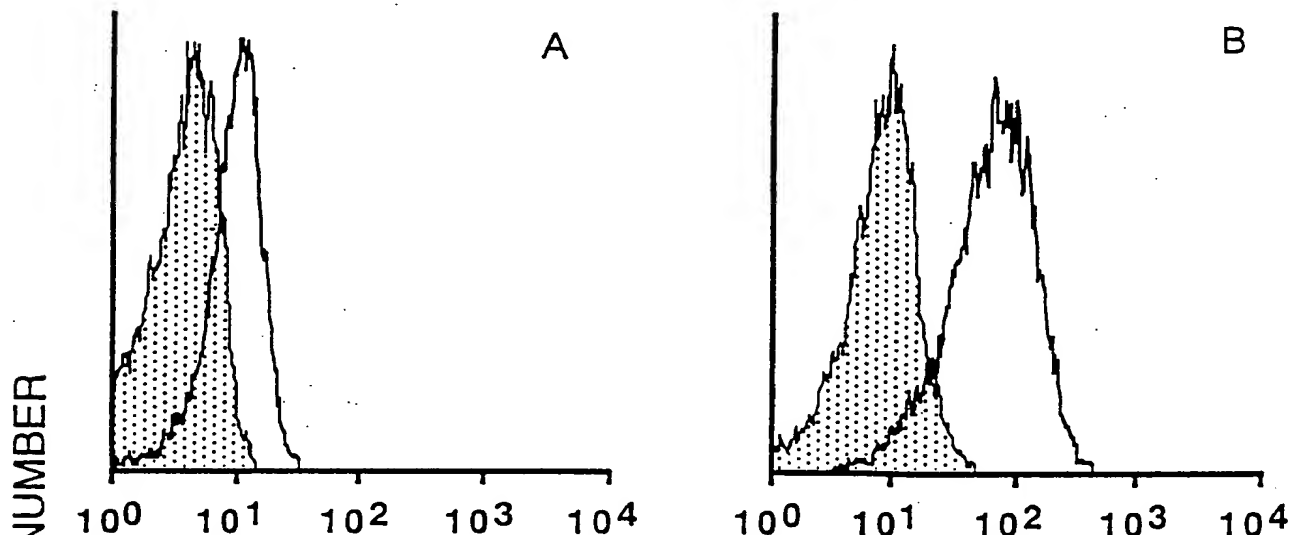
Figure 3



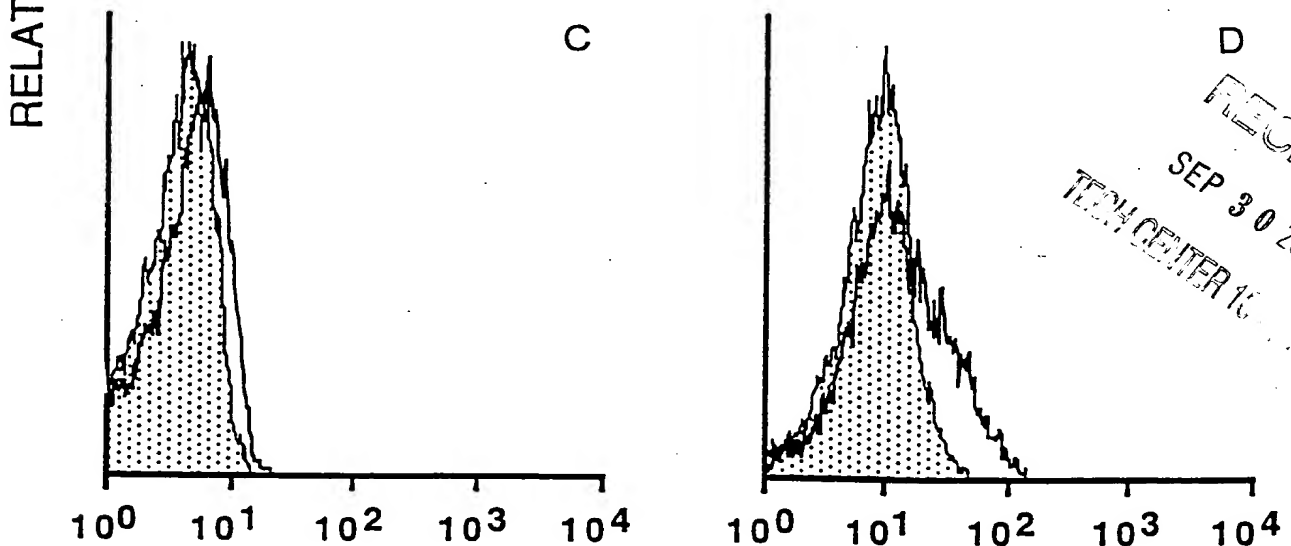
NONINFECTED

+mCD40-L ADENOVIRUS

CD54 EXPRESSION



CD80 EXPRESSION



RELATIVE FLUORESCENCE INTENSITY

Figure 4

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TECH CENTER 16

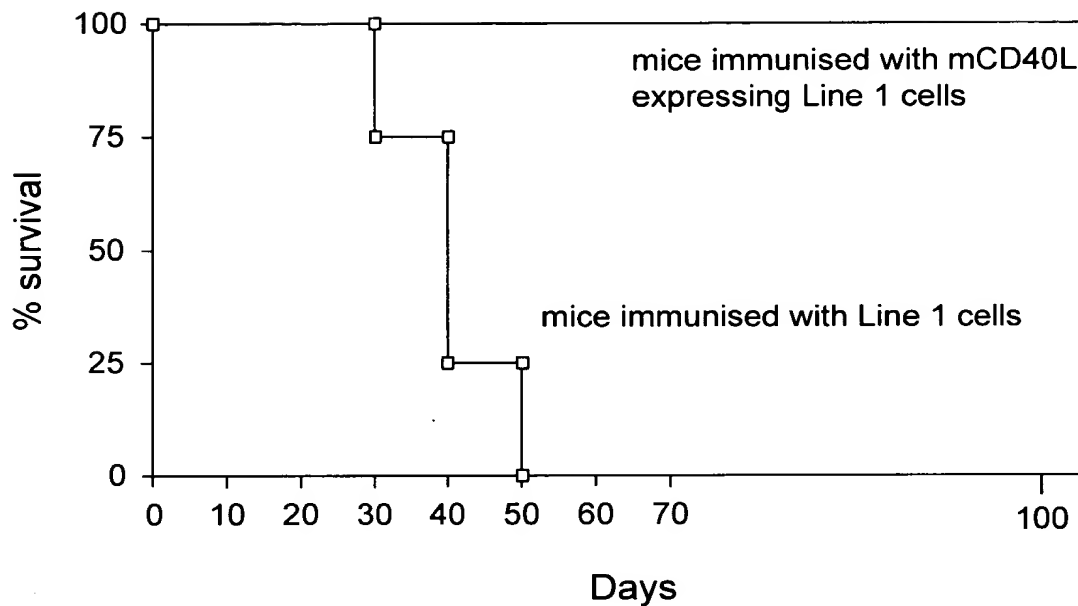


Figure 7

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TECHNICAL SERVICES

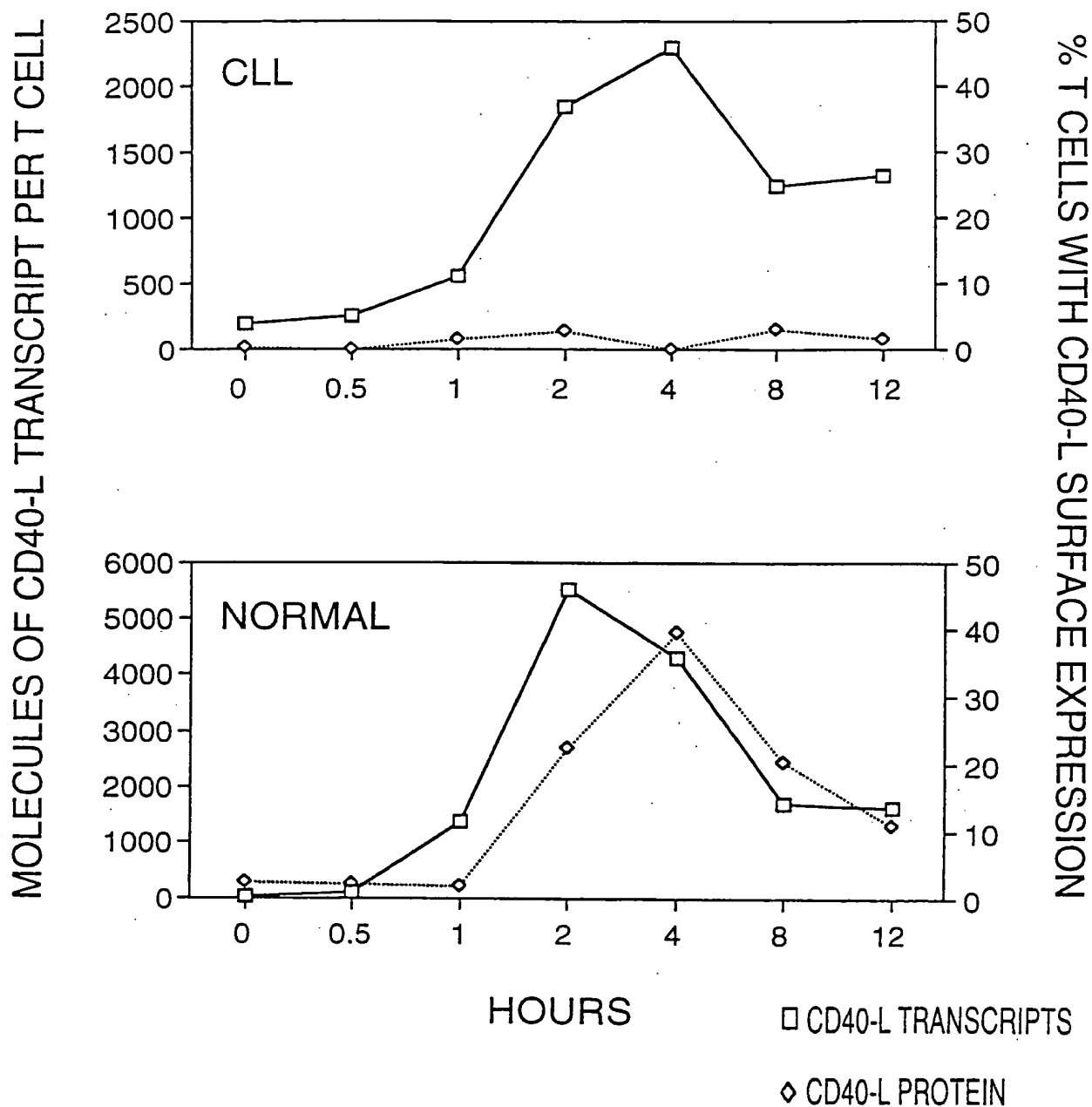
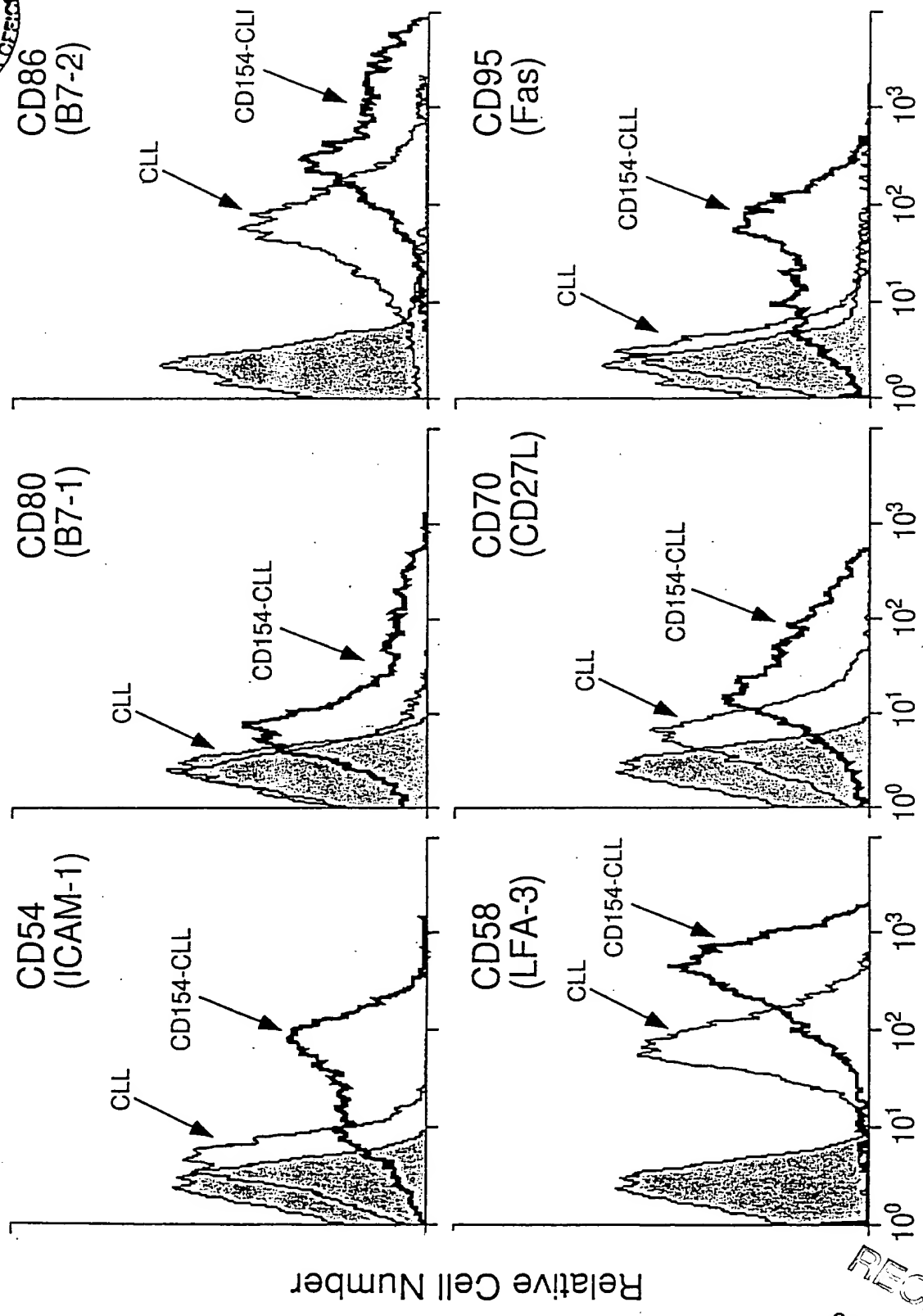


Figure 8

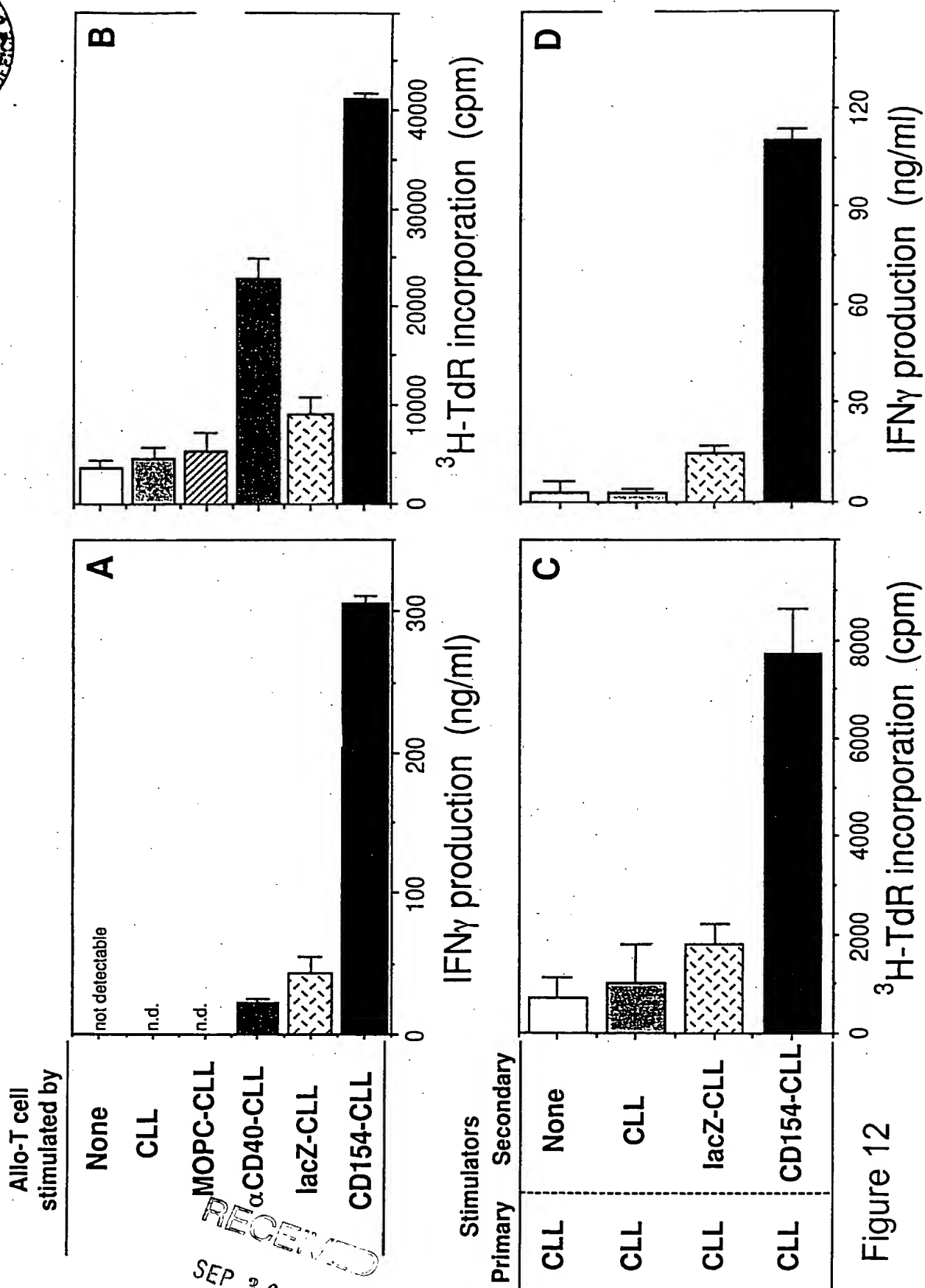
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TTCN CENTER 10/1/03



Green Fluorescence Intensity

Figure 10

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 TECH CENTER 1600/2000



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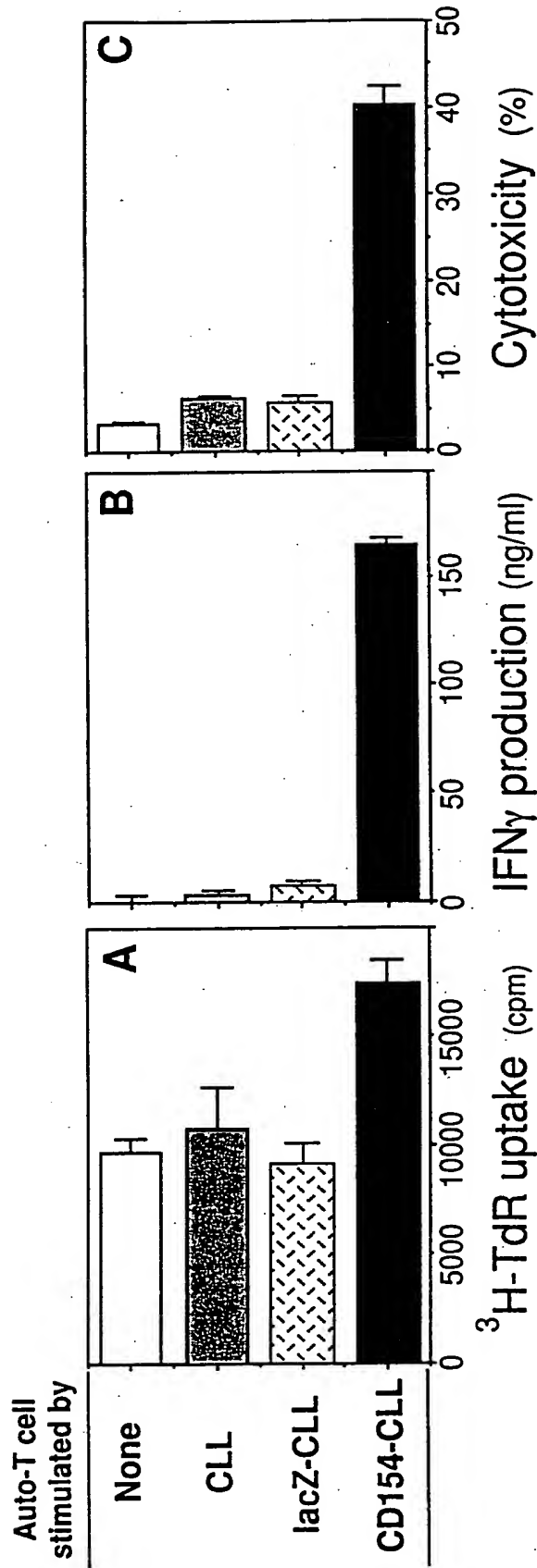


Figure 13

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 TECH CENTER 1600/2900

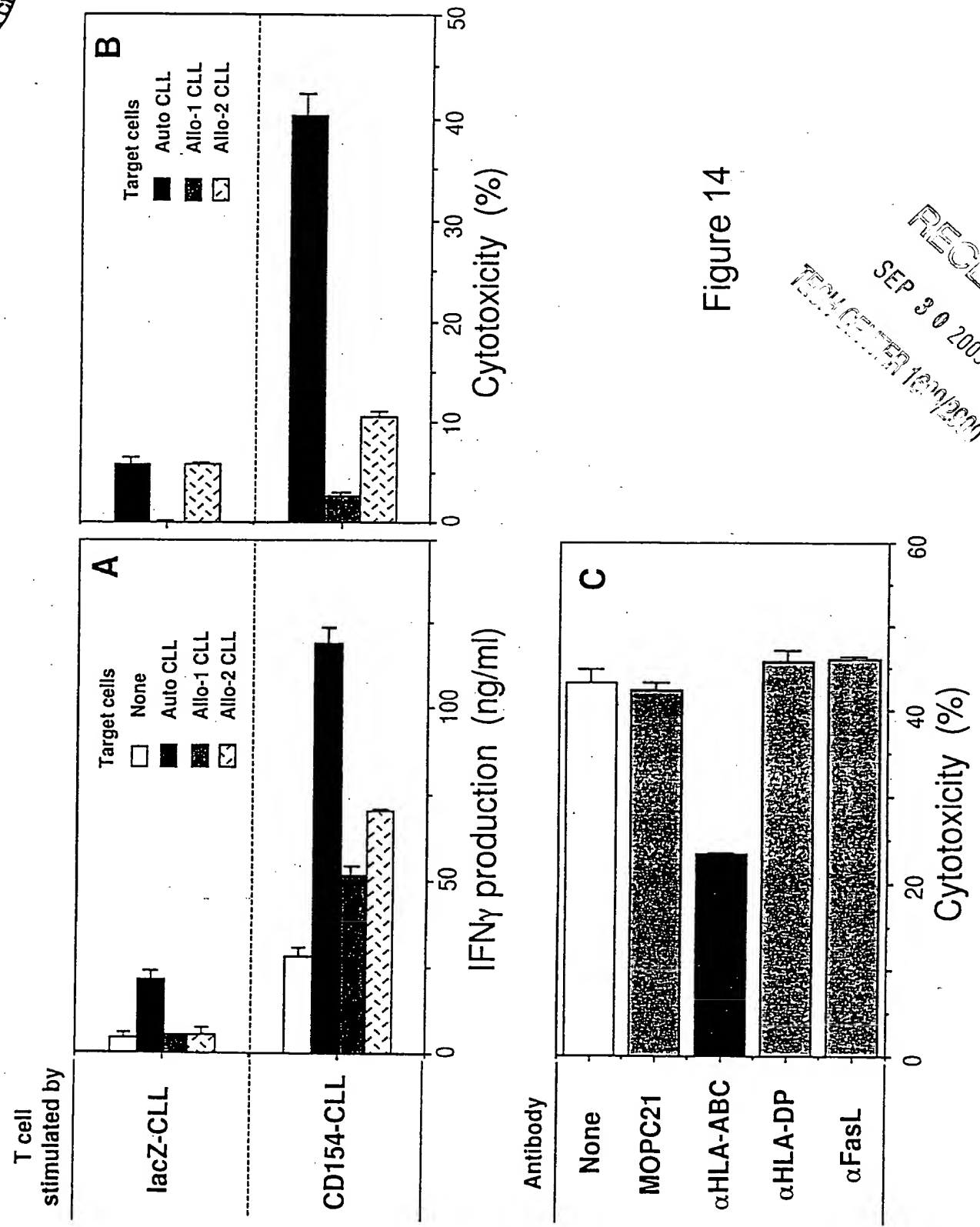


Figure 14

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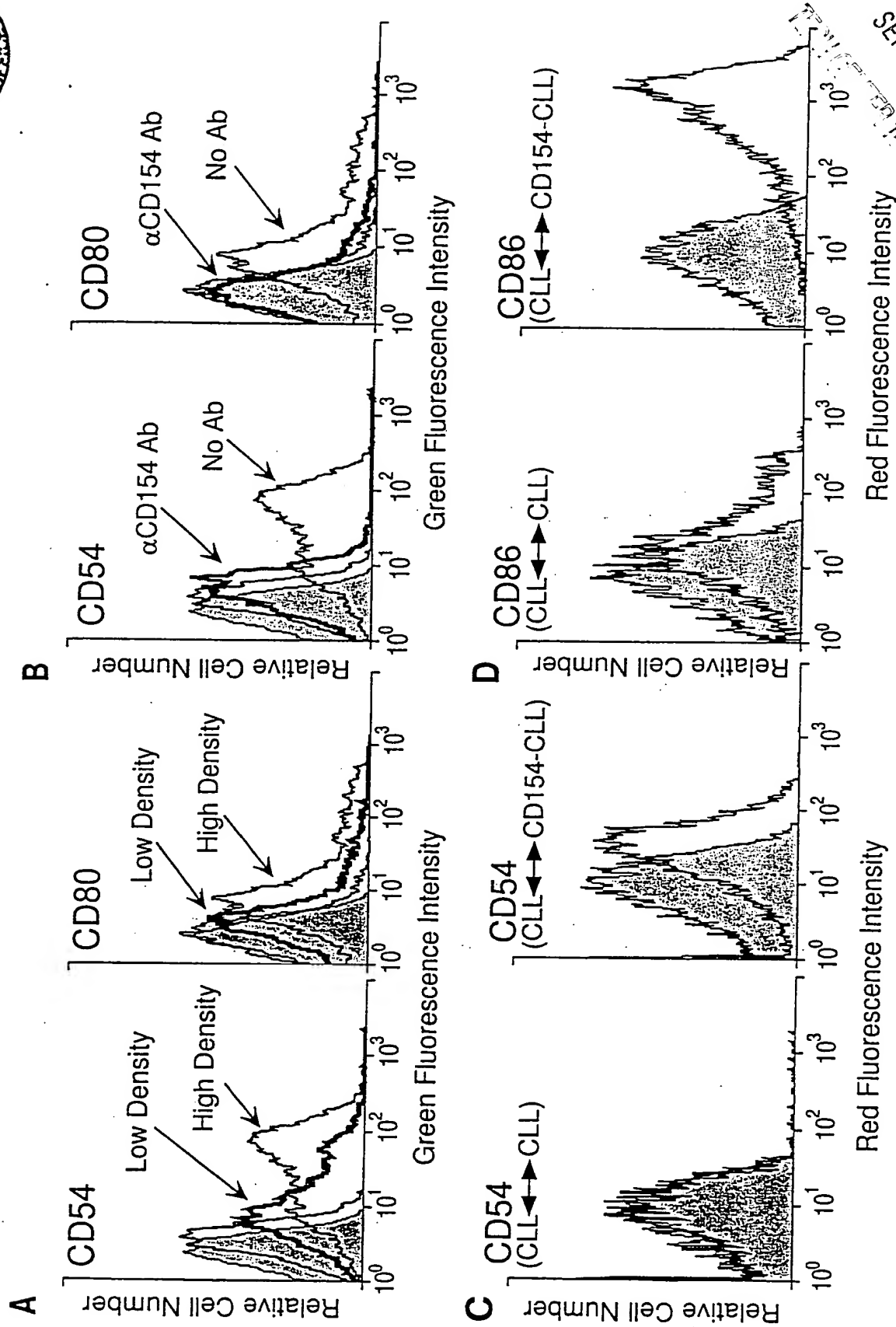


Figure 15

SEP 30 2003
 PATENT & TRADEMARK OFFICE

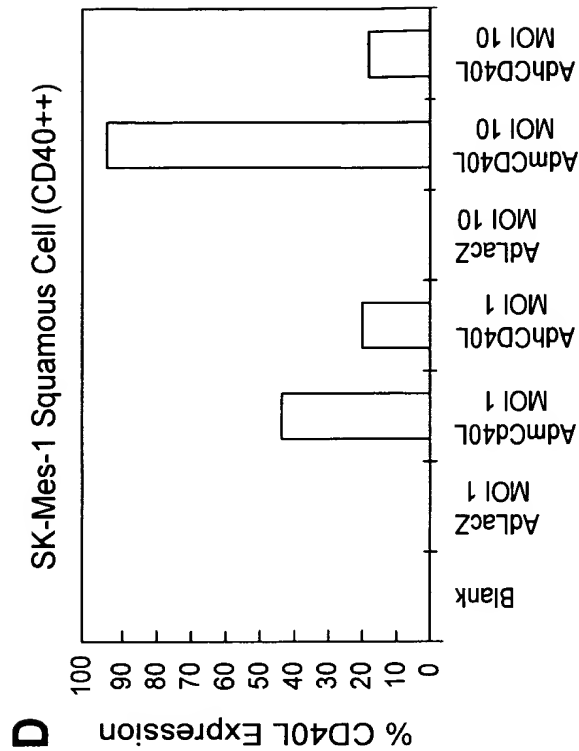
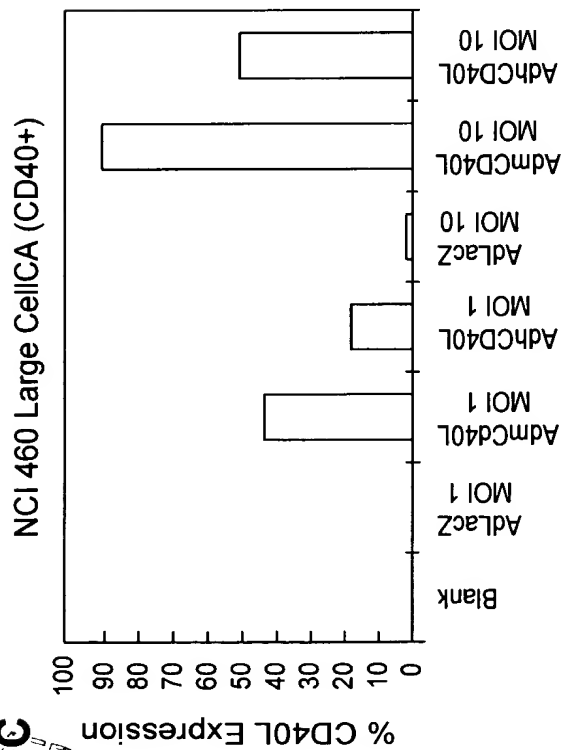
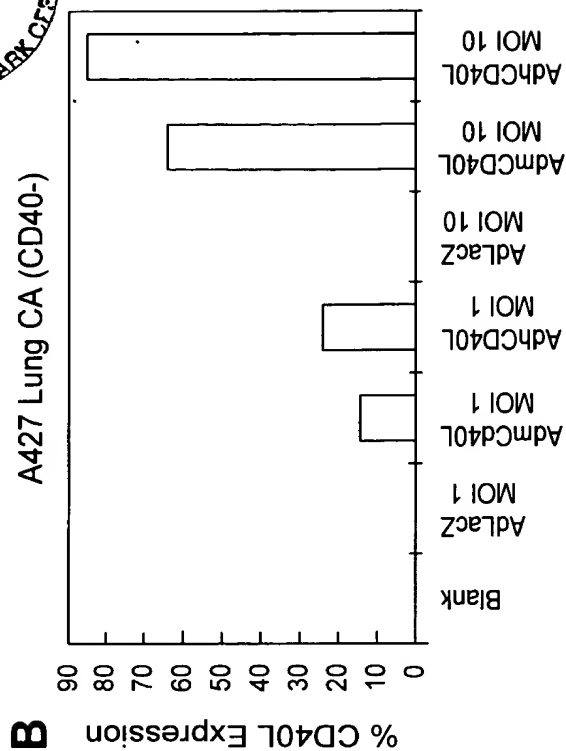
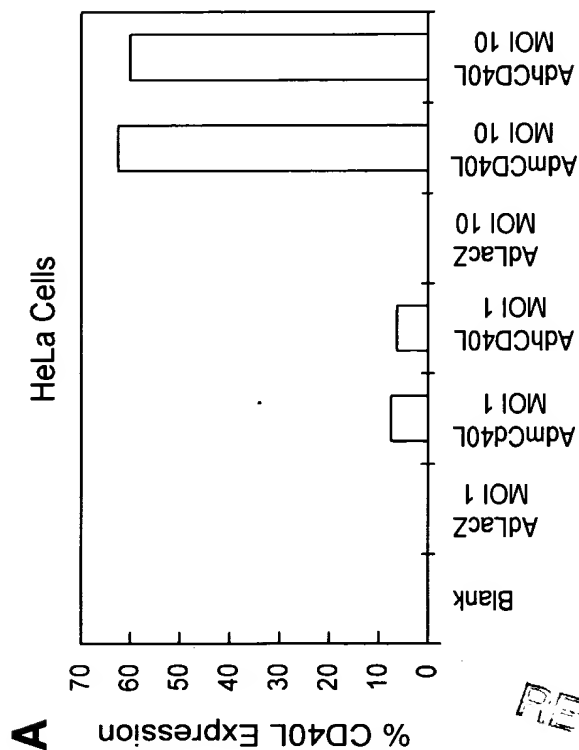


Figure 21

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A

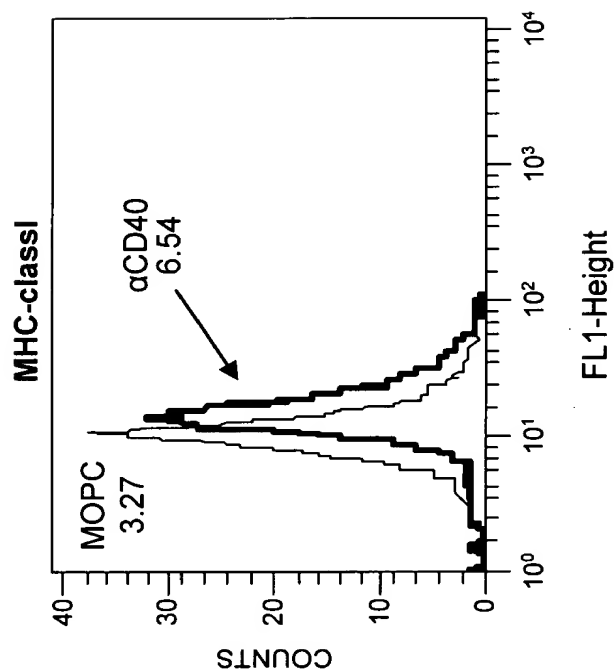
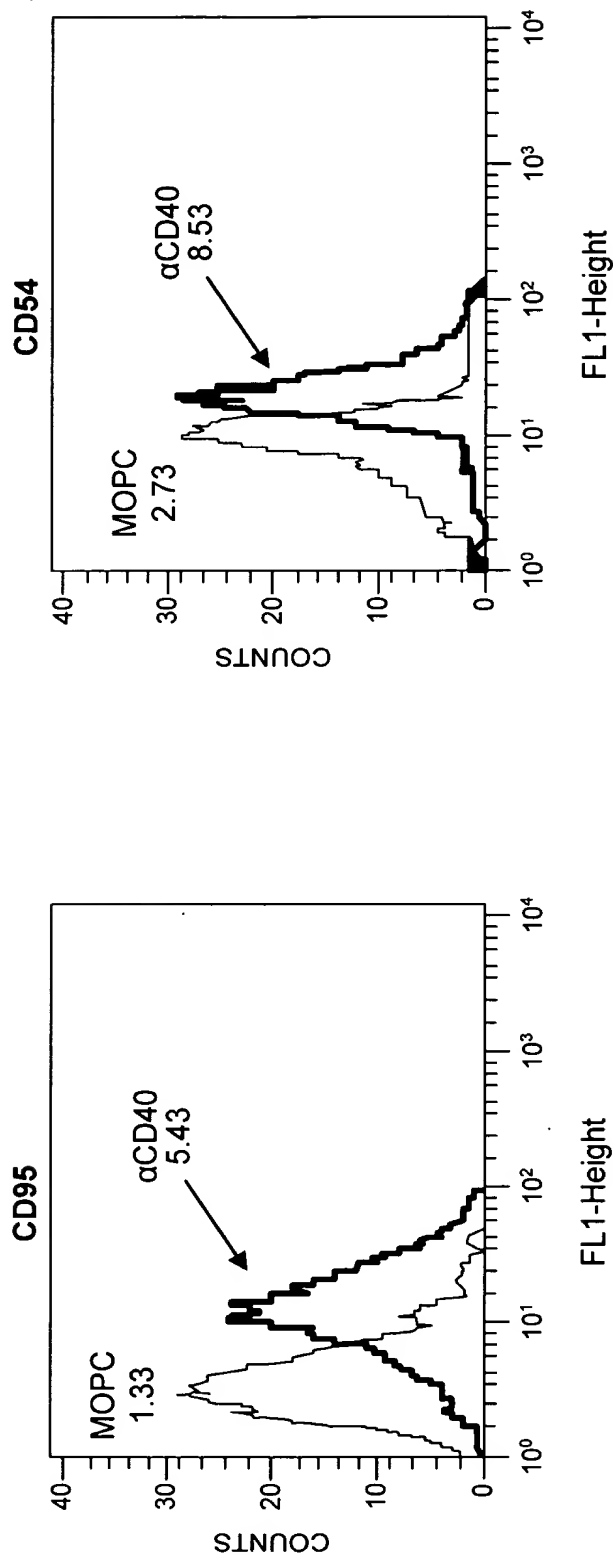


Figure 22a

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B

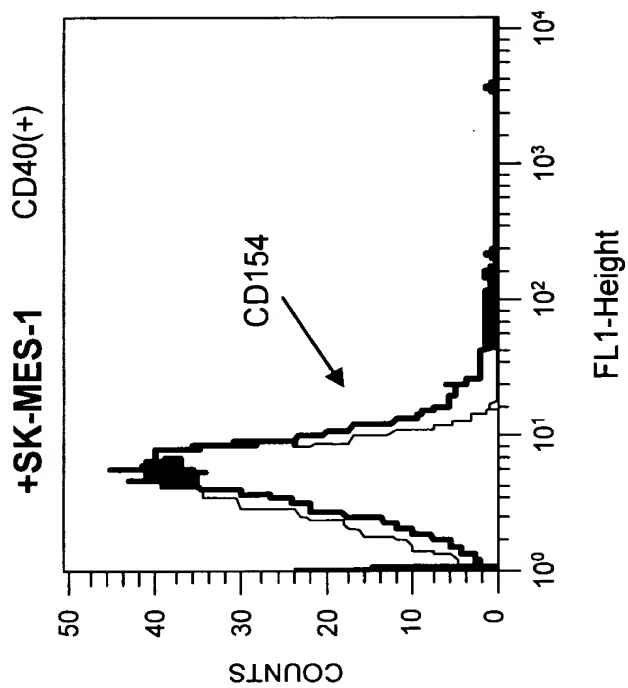
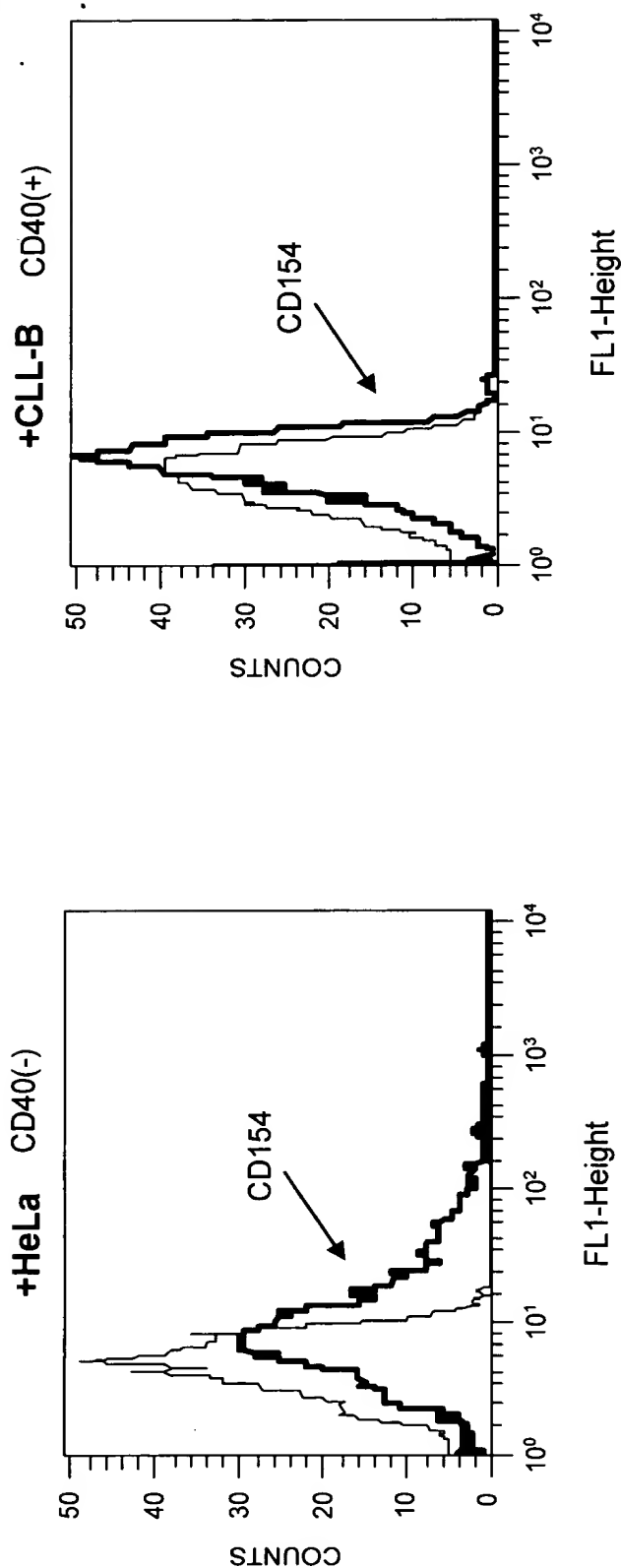


Figure 22b

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RA SYNOVIAL FLUID AND PLASMA INHIBITION OF FAS-LIGAND

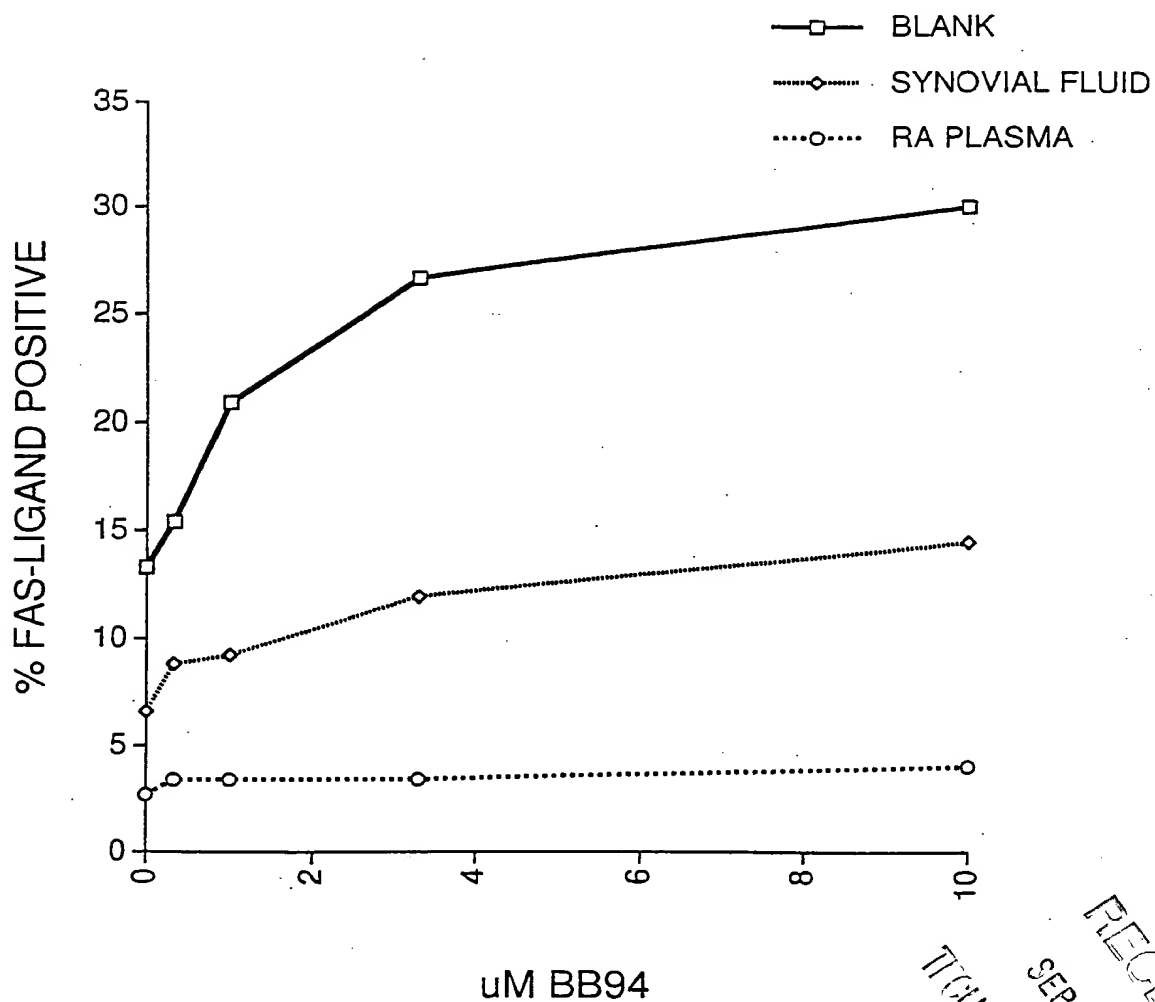


Figure 23

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TIC/CENTR 1630/2900



Gene Therapy of Leukemia

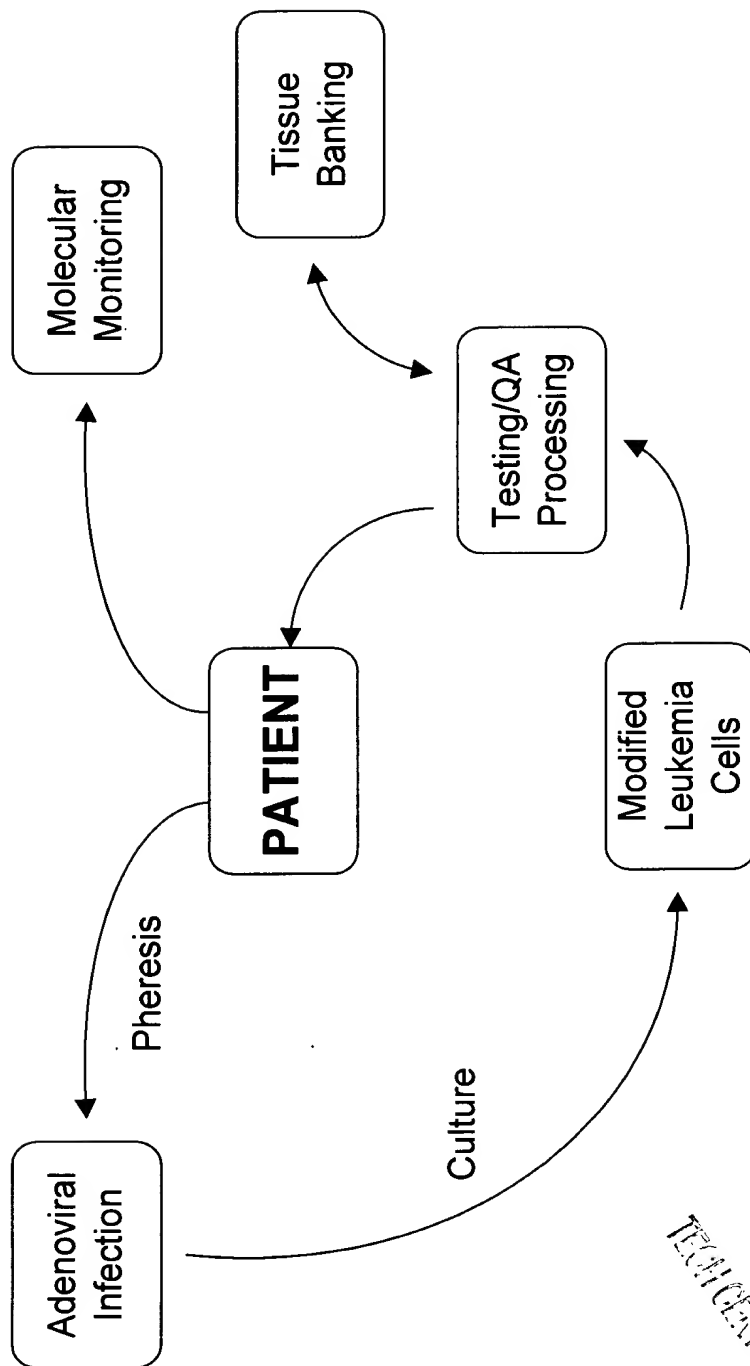


Figure 24

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TECH CENTER 1639/2000

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TECH CENTER 1601330

Collagenases							
P₄	P₃	P₂	P₁	P'₁	P'₂	P'₃	P'₄
MMP-1		Interstitial Collagenase					
P ₄	P ₃	P ₂	P ₁	P' ₁	P' ₂	P' ₃	P' ₄
Ala	Pro	Leu	Gly	Met	Arg	Met/Ala	Arg
Gly/Leu	Leu	Met/Tyr	His	Leu	Leu	Gly	Lys
Met	Ala	Val/Gly	Glu	Ile	Phe	Val	Gln
Glu	Asp	Ile	Tyr	Gln	Trp	Ser	Ile
Pro	Ser	Gln/Arg	Ala	Pro	Glu	Glu	Gly
Tyr	Glu	Asp	Phe	Phe	Ala	Phe	Ser
Ile	Gly	Glu	Gln	Ala	Val/Gly	Arg	Glu
Thr	Arg	Ala	Asn	Tyr/Val	Ser	Pro	Ala
Arg				[not K,E,W]	Asn		

MMP-8	Neutrophil Collagenase
P₄	P₃
Ala	Pro
Gly/Leu	Leu
Met	
Glu	
Pro	
Tyr/Ile/Thr/Arg	
(otherwise same as MMP-1)	
P₂	P₁
Leu	Leu
Gln	Gln

Figure 28A



Gelatinases

MMP-2 Gelatinase A

P ₄	P ₃	P ₂	P ₁	P' ₁	P' ₂	P' ₃	P' ₄
Gly	Pro	Arg	Gly	Leu	Ala/Leu	Gly/Ala	Gln
Ile	Ala	Gln	Asn	Ile/Phe	Phe/Trp	Leu	Arg
Pro	Arg	Leu	Ala	Val/Met	Gly	Ser	His
Arg	Ala	Lys	His	Ala	Arg/Gln	Pro	Pro
Leu	Ile	Ile	Leu	Glu	His		
	His		Tyr	Gln/Asn	Val		
				Ser			

MMP-9 Gelatinase B

P ₄	P ₃	P ₂	P ₁	P' ₁	P' ₂	P' ₃	P' ₄
	Pro	Arg	Gly	Leu	Glu	Ala	Thr
		Gln		Ile/Phe	Ala/Leu/Phe	Leu	
Gln/Arg		Leu		Val/Met	Trp/Gly	Ser	
				Ala		Gly	

Stromelysins

MMP-3 Stromelysin 1

P ₄	P ₃	P ₂	P ₁	P' ₁	P' ₂	P' ₃	P' ₄
Asp	Pro	Phe	Glu	Leu	Arg	Ala	Thr
Gly	Ala	Leu/Met	Ala	Phe	Leu/Phe	Arg/Met	
Gln/Arg							
Leu	Val	Tyr	Gln/Phe	Trp/Tyr	Trp	Gly	Pro
Ile	Leu	Pro/Gly/Glu	Asn	Ile	Val	Val/Ile	
Glu/Val							
Leu	Thr	Ile	His	Val	Gln	Ser/Asn	Ala
Lys	Phe	Ala	Gly	Met	His/Met	Glu/Thr	
Gly/Asp							
Arg	Arg	Ser	Leu/Pro	Glu	Glu/Ser/Thr	Leu	
Ser/Lys/Phe							
Pro/Met	Ser/Gly						
Ala/Phe/Gln			Lys/Tyr/Arg				

Figure 28B



MMP-10 Stromelysin 2

P ₄	P ₃	P ₂	P ₁	P' ₁	P' ₂	P' ₃	P' ₄
Arg	Ala	Ile	His	Ile	Gln	Ala	Glu
Gly	Pro	His	Leu	Leu	Val	Glu	Ala

Others

MMP-7 Matrilysin

P ₄	P ₃	P ₂	P ₁	P' ₁	P' ₂	P' ₃	P' ₄
Ile	Pro	Leu	Glu	Leu	Arg	Ala	Gln
Gly	Leu	Gln	Met/Ala	Ile	Met	Val/Arg/Met	
Pro		Val	Pro/Gln	Met	Gln	Gly	

Figure 28C

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